

Appl. No. 10/765,808
Amdt. Dated 09/29/2008
Response to Office Action of 07/31/2008

Attorney Docket No.: N1085-00256
[TSMC2003-0899]

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1 1. (Previously Presented) A plasma etching apparatus comprising a chuck for
2 retaining a substrate and hardware that is formed of a material that includes oxygen
3 impregnated therein such that said oxygen is released when an etching operation is
4 carried out, wherein said hardware comprises a focus ring and at least a portion of said
5 focus ring substantially continuously extends directly underneath a peripheral portion of
6 said chuck.
- 1 2. (Previously Presented). The plasma etching apparatus as in claim 1, wherein
2 said chuck is substantially circular and said focus ring peripherally surrounds said
3 chuck.
- 1 3. (Previously Presented) The plasma etching apparatus as in claim 8, wherein at
2 least a portion of said lower focus ring substantially continuously extends below a
3 peripheral portion of said chuck.
- 1 4. (Original) The plasma etching apparatus as in claim 1, wherein said chuck
2 comprises an electrostatic chuck.
- 1 5. (Original) The plasma etching apparatus as in claim 1, wherein said hardware
2 comprises a focus ring composed primarily of quartz.
- 1 6. (Original) The plasma etching apparatus as in claim 1, wherein said hardware
2 comprises a focus ring formed of a ceramic.

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1 7. (Previously Presented) The plasma etching apparatus as in claim 1, further
2 comprising a further focus ring, said focus ring and said further focus ring forming a
3 focus ring set that peripherally surrounds said chuck.

1 8. (Currently Amended) A plasma etching apparatus comprising a chuck for
2 retaining a substrate and a focus ring set, at least one of said chuck and said focus ring
3 set formed of a material that includes oxygen therein such that said oxygen is released
4 when an etching operation is carried out, said focus ring set including an upper focus
5 ring that laterally surrounds said chuck and a lower focus ring disposed completely
6 below said upper focus ring and directly underneath a peripheral portion of said chuck
7 substrate.

1 9. (Previously Presented) The plasma etching apparatus as in claim 1, further
2 comprising said focus ring maintainable at a temperature no greater than a temperature
3 of said substrate while an etching operation is carried out upon said substrate.

1 10. (Original) The plasma etching apparatus as in claim 9, wherein said chuck
2 comprises an electrostatic chuck and said substrate comprises a semiconductor
3 substrate.

1 11. (Original) The plasma etching apparatus as in claim 9, wherein said focus ring
2 maintains contact with said electrostatic chuck and said electrostatic chuck is cooled
3 during said etching operation.

1 12. (Original) The plasma etching apparatus as in claim 11, wherein said focus ring
2 is disposed peripherally around said substrate and includes a portion that rests on an
3 annular landing section of electrostatic chuck.

1 13-28. (Cancelled)

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29. (Previously Presented) A plasma etching apparatus comprising a chuck for retaining a substrate and a focus ring peripherally surrounding said chuck and formed of a focus ring material that includes oxygen throughout the focus ring material, such that said oxygen is released when an etching operation is carried out, wherein at least a portion of said focus ring substantially continuously extends directly underneath a peripheral portion of said chuck.
30. (Previously Presented) The plasma etching apparatus as in claim 29, further comprising said chuck formed of an oxygen-impregnated material.
31. (Previously Presented) The plasma etching apparatus as in claim 30, wherein said chuck comprises an electrostatic chuck.
32. (Previously Presented) The plasma etching apparatus as in claim 31, wherein said chuck is disposed within an etching chamber and further comprising said etching chamber containing therein further hardware formed of said oxygen-impregnated material.
33. (Cancelled)